

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Combelles, et al Docket No.: 09320.0092USWO  
Serial No.: 09/446958 Filed: 12/29/99  
Int'l Appln No.: PCT/FR98/01398 Int'l Filing Date: 06/30/98  
Title: MULTICARRIER MODULATION USING WEIGHTED PROTOTYPE FUNCTIONS

**CERTIFICATE UNDER 37 CFR 1.8:**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, Box PCT, Washington, D.C. 20231 on August 13, 2002.

By: TerryLee Polk  
Name: TerryLee Polk

Box PCT  
Commissioner for Patents  
Washington, D.C. 20231

Sir:

We are transmitting herewith the attached:

- ☒ Return postcard
- ☒ Transmittal Sheet in duplicate containing Certificate of Mailing
- ☒ Check(s) in the amount of \$130.00 for Petition Fee
- ☒ Other: Petition Under 37 CFR 1.47(a)
- ☒ Documentation and Letter sent September 28, 2000

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725. A duplicate of this sheet is enclosed.

3200 IDS Center  
80 South Eighth Street  
Minneapolis, Minnesota 55402-2215  
USA  
(612) 332-5300

By: John J. Gresens  
Name: John J. Gresens  
Reg. No.: 33,112  
JJG:JAL/tlp



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FEB 03 2004

**OFFICE OF PETITIONS**

#13

S/N 09/446958

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Combelles, et al	Docket No.:	09320.0092USWO
Serial No.:	09/446958	Filed:	12/29/99
Int'l Appln No.:	PCT/FR98/01398	Int'l Filing Date:	06/30/98
Title:	MULTICARRIER MODULATION USING WEIGHTED PROTOTYPE FUNCTIONS		

CERTIFICATE UNDER 37 CFR 1.8:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, Box PCT, Attn: PCT Legal Administrator, Washington, D.C. 20231 on August 13 2002.

By:



Name: TerryLee Polk

PETITION UNDER 37 C.F.R. § 1.47(a)

Box PCT  
Attn: PCT Legal Administrator  
Commissioner for Patents  
Washington, D.C. 20231

**RECEIVED**

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**OFFICE OF PETITIONS**

Dear Sir:

Applicants respectfully request that the August 28, 2000 Notification of Acceptance be reaffirmed to reflect the acceptance of the application absent the signature of one of the inventors. This matter entered the National Stage on December 29, 1999. A Notification of Missing Requirements was subsequently mailed on March 8, 2000. The filing particulars included an unsigned Combined Declaration and Power of Attorney. A Combined Declaration and Power of Attorney signed by two of the three named inventors was filed August 3, 2000. Applicants subsequently received a Notification of Acceptance mailed August 28, 2000.

With the exception of Mr. Ali JALALI, all the inventors signed the Combined Declaration and Power of Attorney. Applicants submit that due diligence has been exhibited in attempting to obtain Mr. JALALI's signature. In support of this assertion, Applicants enclose a copy of a letter sent to Mr. JALALI dated September 28, 2000 requesting his signature, along with a translation of the letter. The letter was written by Christian Hamon, who is affiliated with

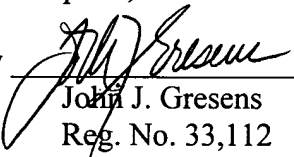
the assignee, France Telecom. Copies of documentation that accompanied the letter are also enclosed.

Mr. JALALI's last known address is: Chez M. HAMID ESMAILI; 7, JALAL ALLEY; ASEF STREET; ZAFARANEIH, VALIASRAV; TEHERAN (19877). As indicated in the attached letter, an attempt was made to contact Mr. JALALI at his last known address in Teheran to obtain his signature on the Combined Declaration and Power of Attorney. However, the Applicants, the assignees, and their representatives have not received a response from Mr. JALALI. For these reasons, Applicants request that the Notification of Acceptance reflect that the application is accepted without the signature of Mr. JALALI.

Please find enclosed the petition fee of \$130.00. Please charge any other fee that may be necessary in consideration of this petition to Merchant & Gould deposit account no 13-2725. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicant's primary attorney-of-record, John J. Gresens (Reg. No. 33,112), at 612.371.5265.

Respectfully Submitted,  
Merchant & Gould P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

Dated: Aug 13, 2002

By   
John J. Gresens  
Reg. No. 33,112

**RECEIVED**

FEB 03 2004

**OFFICE OF PETITIONS**



Dear Sir,

Please find herewith enclosed for signature a power of attorney concerning the US patent application for which you are one of the inventors. This signature is indispensable to us, our first letter having been without answer.

We than you to send us this document within 3 weeks.

In the meantime, we remain,

Very truly yours

C. HAMON

4 - OCT. 2000

Votre correspondant : C. Hamon  
Téléphone : 02 99 12 48 05  
Référence : FTRD/DSTV/VPI/REN//00/CH

Monsieur ALI JALALI

Chez M. HAMID ESMAILI  
7, JALAL ALLEY  
ASEF STREET  
ZAFARANIEH, VALIASRAV  
TEHERAN (19877)

Cesson-Sévigné, le 28 septembre 2000

OBJET : Demande de brevet aux USA n° 09/446, 958 du 29.12.99 issue de la demande PCT FR98/011398 du 30.06.98 concernant un « Procédé et dispositif de modulation d'un signal multiporteuse de type OFDM/OQAM, et procédé et dispositif de démodulation correspondant », ref CCETT9494 ; Pouvoirs aux USA

*4246 US / LB*

Monsieur,

Je vous adresse ci-joint pour signature un pouvoir relatif à la demande de brevet US du brevet dont vous êtes un des inventeurs. Cette signature nous est indispensable, notre premier envoi étant resté sans réponse.

Merci de nous renvoyer ce document signé sous trois semaines.

Dans cette attente, nous vous prions d'agréer, Monsieur, l'expression de nos sentiments distingués.

Le Responsable Protection France Télécom R&D Rennes



Christian HAMON

**RECEIVED**

FEB 03 2004

**OFFICE OF PETITIONS**

## INSTRUCTIONS

## ASSIGNMENT OF U.S. RIGHTS TO CORPORATION

WE,                      AS,

Inventor(s) Name,  
Address, Citizenship

1. Pierre M. Combelles residing at 32, rue Bigot de Preameneu, 35000 Rennes, France and a citizen of France;
2. Dominique M. LaCroix residing at 18, square Alain Fergent, 35000 Rennes, France and a citizen of France;
3. Ali M. Jalali residing at 32K, rue Mirabeau, 35700 Rennes, France and a citizen of France;

Date Patent Declaration  
Signed and Title Serial  
No. and filing date (if  
known)

(herein called "THE UNDERSIGNED") have made an invention and have executed an application for Letters Patent of the United States on                      for this invention, which application is entitled MULTICARRIER MODULATION USING WEIGHTED PROTOTYPE FUNCTIONS and which has been given Serial Number                      and the filing date of December 29, 1999;

Name of Corporation

AND WHEREAS France Telecom (herein called "ASSIGNEE"), a corporation organized under the laws of France, and having an office and place of business at 6, place d'Alleray, 75015 Paris, France

AND WHEREAS Telediffusion de France (herein called "ASSIGNEE"), a corporation organized under the laws of France, and having an office and place of business at 10, rue d'Ouradour-sur-Glane, 75732 Paris Cedex 15, France

State or Country of  
Incorporation and Address

wishes to acquire the entire right, title and interest in and to said invention and patent application and any Letters Patent to be obtained therefor;

NOW, THEREFORE, for and in consideration of the sum of One Dollar and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, THE UNDERSIGNED hereby sell, assign and transfer to the ASSIGNEE, its successors and assigns, the entire right, title and interest for the United States in and to the invention disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and THE UNDERSIGNED hereby authorize and request the Commissioner of Patents to issue any and all United States Letters Patent for the aforesaid invention to the ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED hereby agree that THE UNDERSIGNED, their executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represent and agree with said ASSIGNEE its successors and assigns, that no assignment grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by THE UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED have hereunto set their  
on the dates indicated below.

Each inventor must sign & date

Note: No legalization or other  
witness required

Signature

Date

25 Jan. 2000

Signature

Date

3 Jan. 2000

Signature

Date

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is concerned with a public interest. The public interest is served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

(1) prior art cited in search reports of a foreign patent office in a counterpart application, and

(2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim;

(2) It refutes, or is inconsistent with, a position the applicant takes in:

(i) Opposing an argument of unpatentability relied on by the Office, or

(ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

(1) Each inventor named in the application:

(2) Each attorney or agent who prepares or prosecutes the application; and

(3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.



MERCHANT & GOULD P.C.  
United States Patent Application

## COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: MULTICARRIER MODULATION USING WEIGHTED PROTOTYPE FUNCTIONS

The specification of which

☐ is attached hereto

☒ was filed on December 29, 1999 as application serial no. and was amended on (if applicable) (in the case of a PCT-filed application) described and claimed in international no. PCT/FR98/01398 filed June 30, 1998 and as amended on (if any), which I have reviewed and for which I solicit a United States patent.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (attached hereto).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

☐ no such applications have been filed.

☒ such applications have been filed as follows:

FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC § 119			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)
France	FR 97 08547	July 1, 1997	
ALL FOREIGN APPLICATION(S), IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S)			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

I hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as required in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national PCT international filing date of this application.

U.S. APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

U.S. PROVISIONAL APPLICATION NUMBER	DATE OF FILING (Day, Month, Year)

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

Albrecht, John W.  
Anderson, Gregg-I.  
Ansems, Gregory M.  
Batzli, Brian H.  
Beard, John L.  
Berns, John M.  
Black, Bruce E.  
Bruess, Steven C.  
Byrne, Linda M.  
Carlson, Alan G.  
Caspers, Philip P.  
Chiapetta, James R.  
Clifford, John A.  
Cochran, William W.  
Daignault, Ronald A.  
Daley, Dennis R.  
Dalglish, Leslie E.  
Daulton, Julie R.  
DeVries Smith, Katherine M.  
DiPietro, Mark J.  
Edell, Robert T.  
Epp Ryan, Sandra  
Elance, Robert J.  
Foggin, Matthew J.  
Giolla, Charles E.  
Gorman, Alan G.  
Gould, John D.  
Gregson, Richard  
Hresens, John J.  
Hamre, Curtis B.  
Hillson, Randall A.  
Holzer, Jr., Richard J.  
Johnston, Scott W.  
Kadievitch, Natalie D.  
Kastelic, Joseph M.  
Kettelberger, Denise  
Kays, Jeramie J.  
Kearl, Homer L.  
Kowalchuk, Alan W.  
Kowalchuk, Katherine M.

Reg. No. 10,481  
Reg. No. 28,828  
Reg. No. 42,264  
Reg. No. 32,960  
Reg. No. 27,612  
Reg. No. 43,496  
Reg. No. 41,622  
Reg. No. 34,130  
Reg. No. 32,404  
Reg. No. 25,959  
Reg. No. 33,227  
Reg. No. 39,634  
Reg. No. 30,247  
Reg. No. 26,652  
Reg. No. 25,968  
Reg. No. 34,994  
Reg. No. 40,579  
Reg. No. 36,414  
Reg. No. 42,157  
Reg. No. 28,707  
Reg. No. 20,187  
Reg. No. 39,667  
Reg. No. 40,620  
Reg. No. 44,125  
Reg. No. 26,896  
Reg. No. 38,472  
Reg. No. 18,223  
Reg. No. 41,804  
Reg. No. 33,112  
Reg. No. 29,165  
Reg. No. 31,838  
Reg. No. 42,668  
Reg. No. 39,721  
Reg. No. 34,196  
Reg. No. 37,160  
Reg. No. 33,924  
Reg. No. 42,724  
Reg. No. 21,197  
Reg. No. 31,535  
Reg. No. 36,848

Lacy, Paul E.  
Larson, James A.  
Liepa, Mara E.  
Lindquist, Timothy A.  
McDonald, Daniel W.  
McIntyre, Jr., William F.  
Mueller, Douglas P.  
Pauly, Daniel M.  
Phillips, John B.  
Plunkett, Theodore  
Pytel, Melissa J.  
Reich, John C.  
Reiland, Earl D.  
Schmaltz, David G.  
Schuman, Mark D.  
Schumann, Michael D.  
Scull, Timothy B.  
Sebald, Gregory A.  
Skoog, Mark T.  
Soderberg, Richard  
Stoll-DeBell, Kirstin L.  
Storer, Shelley D.  
Sumner, John P.  
Sumners, John S.  
Swenson, Erik G.  
Tellekson, David K.  
Trembath, Jon R.  
Underhill, Albert L.  
Vandenburgh, J. Derek  
Wahl, John R.  
Weaver, Karrie G.  
Welter, Paul A.  
Whipps, Brian  
Wickham, J. Scot  
Williams, Douglas J.  
Witt, Jonelle  
Xu, Min S.  
Zeuli, Anthony R.

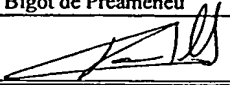
Reg. No. 38,946  
Reg. No. 40,443  
Reg. No. 40,066  
Reg. No. 40,701  
Reg. No. 32,044  
Reg. No. P-44,921  
Reg. No. 30,300  
Reg. No. 40,123  
Reg. No. 37,206  
Reg. No. 37,209  
Reg. No. 41,512  
Reg. No. 37,703  
Reg. No. 25,767  
Reg. No. 39,828  
Reg. No. 31,197  
Reg. No. 30,422  
Reg. No. 42,137  
Reg. No. 33,280  
Reg. No. 40,178  
Reg. No. P-43,352  
Reg. No. 43,164  
Reg. No. 45,135  
Reg. No. 29,114  
Reg. No. 24,216  
Reg. No. 45,147  
Reg. No. 32,314  
Reg. No. 38,344  
Reg. No. 27,403  
Reg. No. 32,179  
Reg. No. 33,044  
Reg. No. 43,245  
Reg. No. 20,890  
Reg. No. 43,261  
Reg. No. 41,376  
Reg. No. 27,054  
Reg. No. 41,980  
Reg. No. 39,536  
Reg. No. 45,255


I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/ organization who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Merchant & Gould P.C. to the contrary.

Please direct all correspondence in this case to Merchant & Gould P.C. at the address indicated below:

Merchant & Gould P.C.  
3100 Norwest Center  
90 South Seventh Street  
Minneapolis, MN 55402-4131

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

<b>Full Name Of Inventor</b>	<b>Family Name</b> Combelles	<b>First Given Name</b> Pierre	<b>Second Given Name</b> M.
<b>Residence &amp; Citizenship</b>	<b>City</b> Rennes	<b>State or Foreign Country</b> France	<b>Country of Citizenship</b> France
<b>Post Office Address</b>	<b>Post Office Address</b> 32, rue Bigot de Preameneu	<b>City</b> Rennes	<b>State &amp; Zip Code/Country</b> 35000 / France
<b>Signature of Inventor 201:</b> 			<b>Date:</b> 25. jan. 2000

<b>Full Name Of Inventor</b>	<b>Family Name</b> LaCroix	<b>First Given Name</b> Dominique	<b>Second Given Name</b> M.
<b>Residence &amp; Citizenship</b>	<b>City</b> Rennes	<b>State or Foreign Country</b> France	<b>Country of Citizenship</b> France
<b>Post Office Address</b>	<b>Post Office Address</b> 18, square Alain Fergent	<b>City</b> Rennes	<b>State &amp; Zip Code/Country</b> 35000 / France
<b>Signature of Inventor 202:</b> 			<b>Date:</b> 31 jan. 2000

<b>Full Name Of Inventor</b>	<b>Family Name</b> Jalali	<b>First Given Name</b> Ali	<b>Second Given Name</b> M.
<b>Residence &amp; Citizenship</b>	<b>City</b> Rennes	<b>State or Foreign Country</b> France	<b>Country of Citizenship</b> France
<b>Post Office Address</b>	<b>Post Office Address</b> 32K, rue Mirabeau	<b>City</b> Rennes	<b>State &amp; Zip Code/Country</b> 35700 / France
<b>Signature of Inventor 203:</b>			<b>Date:</b>

Destinataire : Al. Jaleli 7 Jaleli Alley  
ASEF STREET  
ZA FARANDEH, VALIASRAH  
19833  
Localité TEHERAN Pays IRAN

date N° Prix vd Nature signature de l'agent  
étiquette 510  
Poids crbt

517/517 bis  
VOIR AU DOS  
RCS Numéro 8 356 000 000

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LA POSTE  
FRANCE  
AVIS DE RÉCEPTION D'UN ENVOI INTERNATIONAL  
AVIS DE PAIEMENT / INSCRIPTION D'UN MANDAT SUR UN CCP  
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Service des Postes  
PRIORITAIRE / PAR AVION  
Timbre du bureau  
renvoyant l'avis

Bureau de dépôt  
Cosanséviqne  
Date de dépôt  
Destinataire de l'envoi (nom, adresse, pays de destination) :  
Al. Jaleli 7 Jaleli Alley  
ASEF STREET  
TEHERAN 19833 IRAN

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☐ envoi standard ☐ colis postal ☐ livre ☐ sac M  
☐ PRIORITAIRE ☐ ÉCONOMIQUE  
☒ n° de l'envoi : ☐ valeur déclarée  
montant :  
Services financiers  
mandat n° : montant :  
A compléter par le bureau de dépôt

A compléter par l'expéditeur  
Renvoyer à  
Nom ou raison sociale C. HATTOV  
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4 Rue du Clos (oublé)  
Code postal et localité  
35512 Cosanséviqne  
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Date et signature  
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Domènec Ali STALLA

des 7. HANID ESMAILI

7 JAVAR BULET

AS EF STREET

ZAFARANIYH, VALIASRAY

TEHERAN (19847) I.RAN

سہلان - جہانگیر علی پھر -، بخوانند (جہانگیر علی پھر)  
 مع اصطف - کوئی جہانگیر - بخوانند - بخوانند - بخوانند  
 ۱۹۸۷۷

(ن، غ، ح، ط، ز، با، تہ)